WHAT IS CLAIMED IS:

1.   A positioning method for a mobile terminal having a positioning function, wherein a positioning result is obtained by selectively using:

data obtained by a positioning calculation;

5   data obtained by a first calculation process for finding out a weighted average value from the results of two or more latest positioning calculations based on a plurality of positioning calculations; or

data obtained by a second calculation process for finding out a weighted average value by adding the result of the latest positioning

10   calculation as a calculation factor to the weighted average of past positioning calculation results based on a plurality of positioning calculations.

2.   A positioning method for a mobile terminal having a positioning function, wherein a positioning result is obtained by selectively using:

data obtained by a positioning calculation;

5   data obtained by a first calculation process for finding out a weighted average value from the results of two or more latest positioning calculations based on a plurality of positioning calculations; or

data obtained by a second calculation process for finding out a weighted average value by adding the result of the latest positioning

10   calculation as a calculation factor to the weighted average of past positioning calculation results based on a plurality of positioning calculations;

wherein one of the data is selected based on an application running on the mobile terminal.

3.   A positioning method for a mobile terminal having a

positioning function, wherein a positioning result is obtained by selectively using:

data obtained by a positioning calculation;

5   data obtained by a first calculation process for finding out a weighted average value from the results of two or more latest positioning calculations based on a plurality of positioning calculations; or

data obtained by a second calculation process for finding out a weighted average value by adding the result of the latest positioning

10   calculation as a calculation factor to the weighted average of past positioning calculation results based on a plurality of positioning calculations;

wherein one of the data is selected based on the traveling speed of the mobile terminal.

4.   A positioning method for a mobile terminal having a positioning function, wherein a positioning result is obtained by selectively using:

data obtained by a positioning calculation;

5   data obtained by a first calculation process for finding out a weighted average value from the results of two or more latest positioning calculations based on a plurality of positioning calculations; or

data obtained by a second calculation process for finding out a weighted average value by adding the result of the latest positioning

10   calculation as a calculation factor to the weighted average of past positioning calculation results based on a plurality of positioning calculations;

wherein one of the data is selected based on the state of the mobile terminal determined by comparing the clock speed of a fixed

15   position with the clock speed of the mobile terminal.

5.   The positioning method claimed in claim 1, wherein positioning is continued based on a decision as to whether or not to change the calculation process when the traveling speed of the mobile terminal has changed after selecting one of the data.

6.   The positioning method claimed in claim 2, wherein positioning is continued based on a decision as to whether or not to change the calculation process when the traveling speed of the mobile terminal has changed after selecting one of the data.

7.   The positioning method claimed in claim 3, wherein positioning is continued based on a decision as to whether or not to change the calculation process when the traveling speed of the mobile terminal has changed after selecting one of the data.

8.   The positioning method claimed in claim 4, wherein positioning operation is continued based on a decision as to whether or not to change the calculation process when the traveling speed of the mobile terminal has changed after selecting one of the data.

9.   The positioning method claimed in claim 1, wherein positioning is started with the initialization process.

10.   A mobile terminal with a positioning function, which obtains a positioning result by selectively using:

data obtained by a positioning calculation;

data obtained by a first calculation process for finding out a weighted average value from the results of two or more latest positioning calculations based on a plurality of positioning calculations; or

data obtained by a second calculation process for finding out a

weighted average value by adding the result of the latest positioning calculation as a calculation factor to the weighted average of past
10 positioning calculation results based on a plurality of positioning calculations. .

11. A mobile terminal with a positioning function, which obtains a positioning result by selectively using:

data obtained by a positioning calculation;

data obtained by a first calculation process for finding out a
5 weighted average value from the results of two or more latest positioning calculations based on a plurality of positioning calculations; or

data obtained by a second calculation process for finding out a weighted average value by adding the result of the latest positioning calculation as a calculation factor to the weighted average of past
10 positioning calculation results based on a plurality of positioning calculations;

wherein one of the data is selected based on an application running on the mobile terminal.

12. A mobile terminal with a positioning function, which obtains a positioning result by selectively using:

data obtained by a positioning calculation;

data obtained by a first calculation process for finding out a
5 weighted average value from the results of two or more latest positioning calculations based on a plurality of positioning calculations; or

data obtained by a second calculation process for finding out a weighted average value by adding the result of the latest positioning calculation as a calculation factor to the weighted average of past
10 positioning calculation results based on a plurality of positioning calculations;

wherein one of the data is selected based on the traveling speed of the mobile terminal.

13.   A mobile terminal with a positioning function, comprising a first clock, a second clock and a counter for determining the state and/ or traveling speed of the mobile terminal, which obtains a positioning result by selectively using:

5   data obtained by a positioning calculation;

data obtained by a first calculation process for finding out a weighted average value from the results of two or more latest positioning calculations based on a plurality of positioning calculations; or

data obtained by a second calculation process for finding out a 10   weighted average value by adding the result of the latest positioning calculation as a calculation factor to the weighted average of past positioning calculation results based on a plurality of positioning calculations;

wherein one of the data is selected based on the state and/ or 15   traveling speed of the mobile terminal determined from the difference between a first clock value and a second clock value obtained by the first clock, the second clock and the counter.

14.   The mobile terminal claimed in claim 13, wherein the first clock value is determined based on a clock pulse that occurs at a fixed position.

15.   The mobile terminal claimed in claim 13, wherein the first clock value is determined based on a clock pulse generated by the clock of a mobile terminal network.

16.   A positioning system including the mobile terminal

claimed in one of claims 10 to 15, comprising:

a plurality of signal sources for providing the mobile terminal with signals used to carry out positioning calculations; and

5 a reference clock source for providing the mobile terminal with a clock signal used to determine the state and/ or traveling speed of the mobile terminal;

wherein the mobile terminal determine the state and/ or traveling speed of the mobile terminal using a reference clock value 10 which has been determined based on the clock signal fed by the reference clock source, and selects one of calculation processes to obtain a positioning result based on the state and/ or traveling speed of the mobile terminal.

17. The positioning system claimed in claim 16, wherein the plurality of signal sources are GPS satellites.

18. The positioning system claimed in claim 16, wherein the signals for carrying out positioning calculations are signals transmitted and received by the mobile terminal in a mobile terminal network.

19. The positioning system claimed in claim 16, wherein:
the plurality of signal sources are GPS satellites; and
the reference clock source generates clock signals in a fixed position.

20. The positioning system claimed in claim 16, wherein:
the signals for carrying out positioning calculations are signals transmitted and received by the mobile terminal in a mobile terminal network; and

5 the reference clock source generates clock signals in a fixed

position.